

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Valley Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS
Significant Permit Modification

Frederick County Regional Landfill
Frederick County, Virginia
Permit No. VRO81312
Effective Date: September 30, 2004
Expiration Date: September 29, 2009

As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Frederick County has applied for a significant permit modification to the Title V Operating Permit for its landfill in Frederick County, Virginia. The Department has reviewed the application and has prepared a modified Title V Operating Permit.

Engineer/Permit Contact: _____ - *signed DSF* - _____ Date: 07/13/07
David S. Firley
(540) 574-7823

Air Permit Manager: _____ - *signed SGF* - _____ Date: 07/13/07
Sharon G. Foley, P.E.

Deputy Regional Director: _____ - *signed LMS* - _____ Date: 07/13/07
Larry M. Simmons, P.E.

REQUESTED MODIFICATION

The Valley Regional Office of the Department of Environmental Quality (DEQ) received a request from Frederick County on June 26, 2006 and an amended request received on March 12, 2007, including supplemental information received on September 5, 2006, for changes to its Title V operating permit. The change, listed below, is considered a significant modification to the permit, as defined in 9 VAC 5-80-230. Frederick County has requested that the permit be changed to:

Include the permit conditions that have been changed from Frederick County's minor new source review (NSR) permit dated June 17, 2005, as amended on March 26, 2007, to increase the design capacity of the municipal solid waste landfill (Permit No. 529).

REASON FOR MODIFICATION

On November 14, 2003, the facility's Solid Waste Permit (Permit No. 529) was amended to increase the vertical height. The facility submitted an amended design capacity report on January 9, 2004. This report indicated that the design capacity of the active landfill (Permit No. 529) will be increased from 5.9 million m³ to 11.79 million m³ (15.423 million yd³). The facility submitted a minor NSR permit application on October 13, 2004 for this change in the design capacity of the active landfill. Also included in the application was the installation of an additional utility flare (the second utility flare) to handle the expected increase in LFG collection. It should be noted that the LFG collection system was proposed voluntarily by the facility and not required under NSPS Subpart WWW, as the facility's NMOC emissions are well below 50 Mg/yr. A minor NSR permit was issued to the facility on June 17, 2005 for the increase in design capacity of the active landfill (Permit No. 529) and the installation of the second utility flare.

The construction of the second utility flare did not commence within 18 months from the issuance of the minor NSR permit. Also, the facility notified that the LFG recovery rates at the active landfill (Permit No. 529) are expected to remain below the capacity of the existing flare for at least the next several years, and the source does not anticipate installing the second utility flare in the near future. Accordingly, the June 17, 2005 minor NSR permit was amended on March 26, 2007 to remove the second utility flare. As described above, the second utility flare was proposed voluntarily by the facility and not required under NSPS Subpart WWW. The proposed Title V permit incorporates the new applicable requirements from the June 17, 2005 minor NSR permit, as amended on March 26, 2007.

APPLICABILITY OF 9 VAC 5-80-230

According to 9 VAC 5-80-230, significant modification procedures must be used for those permit modifications that do not qualify as minor permit modifications under 9 VAC 5-80-210 or as administrative amendments under 9 VAC 5-80-200. Frederick County's proposal does not meet the specifications for an administrative amendment or a minor permit modification. The Regulations further list criteria, any of which, if met, require use of significant modification procedures. The changes proposed by Frederick County meet the following criterion, stated in 9 VAC 5-80-230.A.2:

Significant modification procedures shall be used for those permit modifications that require or change a case-by-case determination of an emission limitation or other standard,...

This is because Frederick County's Title V permit modification requires the establishment of emission limitations and standards through the incorporation of the new applicable requirements in the minor NSR permit dated June 17, 2005, as amended on March 26, 2007, to increase the design capacity of their municipal solid waste landfill (Permit No. 529). Since the changes proposed by Frederick County meet at least one criterion listed in 9 VAC 5-80-230 and do not qualify as an administrative amendment or minor permit modification, the changes must be processed as a significant permit modification.

CHANGES TO TITLE V OPERATING PERMIT

The changes made to the existing Title V permit are shown below. Condition and section numbers refer to those in the modified Title V permit.

II. Emission Units:

The active landfill (Permit No. 529) design capacity was increased to 11.79 million m³. The Construction and Demolition Debris (CDD) landfill (Permit No. 591) design capacity units was converted to 3.59 million m³ to reflect the minor NSR permit dated June 17, 2005, as amended on March 26, 2007. There was no design capacity increase for the CDD landfill.

III. Landfill Requirements:

Limitations

Condition A.1: The active landfill (Permit No. 529) design capacity was increased to 11.79 million m³. The Construction and Demolition Debris (CDD) landfill (Permit No. 591) design capacity units was converted to 3.59 million m³ to reflect the minor NSR permit dated June 17, 2005, as amended on March 26, 2007. There was no design capacity increase for the CDD landfill.

Monitoring and Recordkeeping

The following condition subparts have been added in the Title V permit, which reflect the requirements from Condition 20 of the minor NSR permit dated June 17, 2005, as amended on March 26, 2007. Please note the condition number refers to the modified Title V permit.

Condition III.B.2.g: Added condition subpart to record the description, location, amount, and placement date of all nondegradable refuse.

Condition III.B.2.h: Added condition subpart for the facility to record the installation date and location of all vents.

Condition III.B.2.i: Added condition subpart for the facility to keep a copy of the DEQ-approved Dust Control Plan.

Condition III.B.2.j: Added condition subpart for the facility to keep daily logs of the visual survey of the trafficable roads at the site.

Streamlined Requirements

Condition 15 of the minor NSR permit dated 06/17/05, as amended on March 26, 2007

This condition has not been included as all applicable requirements from 40 CFR 60, Subpart WWW have been included in the permit.

Condition 27 of the minor NSR permit dated 06/17/05, as amended on March 26, 2007

This condition has not been included as this requirement is already included in the General Conditions Section of the Title V Permit (Condition VIII.M).

Since construction of the second utility flare has expired and is no longer applicable, the following conditions in the minor NSR permit dated June 17, 2005, as amended on March 26, 2007 have not been included in the modified Title V permit.

Condition 9: Approved fuel for the second utility flare.

Condition 11: Fuel throughput for the second utility flare.

Condition 12: Operating and training procedures for the second utility flare.

Condition 14: Emission limits for the second utility flare.

Condition 15: Visible emission limit for the second utility flare.

Condition 21: Visible emission evaluation for the second utility flare.

Condition 24: Initial notification for the second utility flare.

FUTURE APPLICABLE REQUIREMENTS

On September 8, 2006, EPA proposed amendments (71 FR 53272) to the Landfill New Source Performance Standards (NSPS), Emission Guidelines, Federal Plan, and National Emissions Standards for Hazardous Air Pollutants (NESHAP). In summary the amendments will clarify who is responsible for compliance activities where multiple parties are involved in the ownership or operation of the landfill gas collection, control, and/or treatment systems. In addition, the amendments will revise the NSPS and NESHAP requirements regarding startup, shutdown, malfunction, and routine maintenance. Final action on the amendments is expected by January 2008, as reported in EPA's Unified Agenda (72 FR 23208) published in the Federal Register on April 30, 2007.

PUBLIC PARTICIPATION

The public participation requirements of 9 VAC 5-80-270 apply to significant permit modifications. A public notice regarding the draft permit was placed in the Winchester Star, Winchester, Virginia, on March 30, 2007. EPA was sent a copy of the draft permit and notified of the public notice on March 28, 2007. West Virginia, the only affected state, was sent a copy of the public notice in e-mail dated March 30, 2007. All persons on the Title V mailing list were also sent a copy of the public notice via email dated March 30, 2007.

Public comments were accepted from March 31, 2007 to April 29, 2007. During the public comment period, DEQ received two (2) comments from the public; however there were no requests for a public hearing. A summary of each public comment is listed below:

1. Received April 19, 2007 – Via telephone, an anonymous citizen wanted to express his concerns about the Frederick County Regional Landfill accepting (according to his estimates) 30 tons/day of biosolids from the Opequon Water Reclamation Facility in Frederick County, Virginia. He felt we would be better stewards of the environment if DEQ would require sources to use alternative methods of biosolid disposal (i.e. land application). Additionally, the citizen argued that land application of biosolids would financially benefit local farmers who are permitted to conduct land application operations. The inquirer was verbally provided the regulatory information to request a public hearing during the phone conversation. The anonymous citizen did not request a public hearing during the public comment period.
2. Received April 22, 2007 – Via email, a citizen inquired what the significant modification to the landfill included, along with the type of air pollutants generated from the modification (existing emission levels to future emissions levels). On April 24, 2007, DEQ replied by email and provided the citizen a thorough response to the inquiry, which included a brief history of the events that triggered the permit action, as well as detailing the sources actual emissions from 2005 & 2006 and potential emissions in the year 2033. Additionally in the email, DEQ provided the inquirer the regulatory information to request a public hearing (Refer to email dated April 25, 2007 to the citizen for detailed correspondence). The citizen did not request a public hearing during the public comment period.

On May 4, 2007, EPA was notified via email of the two (2) public inquiries received by DEQ during the public comment period and was provided with the proposed Title V permit, which initiated their 45-day review period. On May 16, 2007, EPA issued an email providing comments and requesting clarifications concerning the proposed Title V permit. DEQ replied to the EPA comments/clarifications via email on May 25, 2007 (Refer to email dated May 25, 2007 to EPA for detailed correspondence). On July 11, 2007, EPA responded by email that they have no further comments and DEQ may proceed with issuing the Title V permit.

ATTACHMENTS

Attachment A – New Source Review Permit dated 06/17/05, as amended on 03/26/07

ATTACHEMENT A

New Source Review Permit dated 06/17/05, as amended on 03/26/07